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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

NEGRON, DANIEL L

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 01/02/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/974,602

Applicant(s)

CHRISTIE, LESLIE G.

Examiner

Daniell L. Negrón

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. Regarding the information disclosure statements (IDS) filed on November 6, 2003 the submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of claims 30-33 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-8, 10, 12-16, 19-22, 24-29, 34, and 42-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Takayama Japanese Patent Application Publication No. 2000-268443.

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Regarding claim 1, Takayama discloses a write once read many (WORM) tape system comprising a tape cartridge (Figs. 3 and 4, element 1) comprising a length of magnetic tape (Fig 3, element 3) adapted to record and store electronic data (paragraph 14, lines 5-6).

Takayama also discloses a WORM tape system, which comprises an electronic memory device (Fig 3, elements 4 and 104) (paragraphs 15 and 16).

Finally, Takayama also discloses a WORM tape system which comprises a tape drive adapted to read and write to the tape, the tape drive receives the tape cartridge and reads the memory device wherein the tape drive is operable only in a WORM mode in response to information read from the memory device (paragraph 13, lines 3-8 and paragraphs 71 and 72).

Regarding claim 3, Takayama discloses a WORM tape system wherein the tape cartridge only functions in a tape drive capable of recognizing the information read from the memory device to place the drive in the WORM mode (paragraph 10). The tape cartridge disclosed by Takayama is only read by the tape drive when the memory device and the tape can be read by the drive.

Regarding claims 4 and 6, Takayama discloses a WORM tape system wherein the information read from the memory device is a tape cartridge (i.e. cassette) type and comprises nonvolatile electronic memory (paragraph 13, lines 3-8).

Regarding claim 5, Takayama discloses a WORM tape system wherein the tape cartridge type is contained on a manufacturer's information data page of the memory device (paragraph 6, lines 8-16). The memory device disclosed by Takayama comprises multiple areas of data, which identify the type of cartridge and the type of operation allowed to be performed by the tape drive.

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Regarding claims 7 and 8, Takayama discloses a WORM tape system wherein the memory device is read only (i.e. EEPROM) (paragraph 21, lines 1-4).

Regarding claim 10, Takayama discloses a write once read many (WORM) magnetic tape with cartridge memory comprising a cartridge (Figs. 3 and 4, element 1).

Takayama also discloses a WORM magnetic tape with cartridge memory wherein a length of magnetic tape is capable of storing electronic data using a characteristic differing from standard type tape media and being operably housed in the cartridge (Fig 3, elements 4 and 104) (paragraph 14, lines 5-6).

Finally, Takayama also discloses a WORM magnetic tape wherein the memory device is capable of being read by selected tape drives adapted to read from and write to the tape medium and identifies the tape as a WORM tape type (paragraph 13, lines 3-8 and paragraphs 71 and 72). Furthermore, Takayama discloses that flags are stored in the memory to identify whether the tape is to be used as WORM (paragraphs 110-112).

Regarding claims 12-16, claims 12-16 have limitations similar to those treated in the above rejections and are met by the reference as discussed above.

Regarding claim 19, Takayama discloses a method to convert a magnetic tape drive to a write once read many (WORM) tape drive comprising the step of providing a magnetic tape cartridge comprising a memory device (Fig 3, elements 4 and 104) and identifying the tape cartridge as a WORM type tape cartridge (paragraph 13, lines 3-8 and paragraphs 71 and 72) and further comprising a length of magnetic tape medium capable of storing electronic data using a characteristic differing from standard type tape media (Fig. 3, element 3 and paragraph 14, lines 5-6).

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Takayama also discloses a method to convert a magnetic tape drive to a WORM tape drive comprising the step of receiving the tape cartridge in the magnetic tape drive and reading the WORM tape type from the memory device (paragraph 15).

Finally, Takayama also discloses a method to convert a magnetic tape drive to a WORM tape drive comprising the step of initializing the tape drive in response to the read tape type in a WORM mode (paragraphs 110-112).

Regarding claims 20 and 21, Takayama discloses a method to convert a magnetic tape drive to a WORM tape drive comprising the step of write protecting data written on a tape in the tape cartridge and limiting functions that the tape drive may perform while the tape is in the drive to tape transport, tape reading and writing to blank portions of a tape in the tape cartridge (paragraphs 110-112).

Regarding claims 22, 24-27, method claims 22, 24-27 are drawn to the method of using the corresponding apparatus claimed in claims 3, 5-8. Therefore method claims 22, 24-27 correspond to apparatus claims 3, 5-8 and are rejected for the same reasons of anticipation as used above.

Regarding claims 28, Takayama discloses a magnetic tape system wherein the characteristic is a write density of the tape (paragraphs 43-47).

Regarding claims 29, 34, and 47, claims 29, 34, and 47 have limitations similar to those treated in the above rejections of claim 28 and are met by the reference as discussed above.

Regarding claims 42-46, claims 42-46 have limitations similar to those treated in the above rejections of claims 1 and 5-8 respectively and are met by the reference as discussed above.

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Regarding claim 48, Takayama discloses a method comprising loading a tape cartridge having a cartridge memory into a tape drive (Fig. 3, elements 4 and 104 and paragraphs 15 and 16).

Takayama also discloses a method comprising reading cartridge type information on the cartridge memory of the tape cartridge determining based the cartridge type information, whether the tape cartridge is one of a read/write cartridge and a WORM cartridge (paragraph 13, lines 3-8 and paragraphs 71 and 72).

Takayama also discloses a method comprising enabling the tape drive to perform overwriting and erasing of data on the read/write cartridge and perform write protection of data in response to a determination (paragraphs 6 and 9-11).

Regarding claims 49 and 50, claims 49 and 50 have limitations similar to those treated in the above rejection of claim 48 and are met by the references as discussed above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 11, 23, and 35-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama Japanese Patent Application Publication No. 2000-268443 in view of Morita U.S. Patent No. 5,612,827.

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Regarding claim 2, Takayama discloses a write once read many (WORM) magnetic tape system with all the limitations of claims 1 as described above. Takayama however fails to mention ejecting the cartridge in response to the drive being unable to recognize the information from the memory device.

Morita discloses a tape drive wherein identification data is read from the cartridge in order to identify the type (i.e. grade) of the tape being inserted into the drive. In the event that the data read from the cartridge is not recognizable or invalid, the cartridge is ejected from the drive (Figs 3-5 and column 8, line 3 through column 9, line 11).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the magnetic tape system as disclosed by Takayama with the ejection apparatus taught by Morita in order to obtain a magnetic tape system wherein the tape is ejected from the drive if an invalid tape is inserted or if the tape is inserted improperly to prevent damage to the magnetic tape or drive and potential loss of protected data stored on the tape.

Regarding claim 11, claim 11 has limitations similar to those treated in the above rejections and are met by the references as discussed above.

Regarding claim 23, method claim 23 is drawn to the method of using the corresponding apparatus claimed in claim 2. Therefore method claim 23 corresponds to apparatus claim 2 and is rejected for the same reasons of obviousness as used above.

Regarding claims 35, 38, and 39, claims 35, 38, and 39 have limitations similar to those treated in the above rejections of claims 1, 2, and 3 respectively and are met by the references as discussed above.

Regarding claim 36, Takayama discloses a magnetic tape drive comprising means for initiating the drive in a standard read/write mode (paragraphs 6 and 9-11).

Regarding claim 37, claim 37 has limitations similar to those treated in the above rejection of claim 28 and are met by the references as discussed above.

Regarding claims 40 and 41, claims 40 and 41 have limitations similar to those treated in the above rejections of claims 39 and 37 respectively and are met by the references as discussed above.

7. Claims 9, 17, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama Japanese Patent Application Publication No. 2000-268443 in view of Amamiya Japanese Patent Application Publication No. 2000-295507.

Regarding claim 17, 32, and 33 Takayama discloses a write once read many (WORM) tape system comprising a tape cartridge (Figs. 3 and 4, element 1) comprising a length of magnetic tape (Fig 3, element 3) adapted to record and store electronic data (paragraph 14, lines 5-6).

Takayama also discloses a WORM tape system, which comprises an electronic memory device (Fig 3, elements 4 and 104) (paragraphs 15 and 16).

Takayama also discloses a WORM tape system which comprises a tape drive adapted to read and write to the tape, the tape drive receives the tape cartridge and reads the memory device wherein the tape drive is operable only in a WORM mode in response to information read from the memory device (paragraph 13, lines 3-8 and paragraphs 71 and 72).

Takayama however fails to mention a tape destruction mechanism operable in response to opening the tape cartridge to render the tape unusable.

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However, Amamiya discloses an electronic device, which contains a spring-loaded mechanism that can destroy a magnetic tape (Fig. 4, element 28) enclosed within in the event that the enclosure of the device is opened. The electronic device disclosed by Amamiya is enclosed by a snap-fitted case (see Fig. 4, elements 18A-B, and 47A-F) and comprises a spring-loaded mechanism (Fig. 10), which comes into contact with the magnetic tape if the case is disassembled (paragraph 51).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the magnetic tape system as disclosed by Takayama with the tape destruction mechanism as taught by Amamiya in order to prevent improper or illegal usage of the magnetic tape if opening of the cartridge is attempted.

Regarding claim 9 claim 9 has limitations similar to those treated in the above rejection of claim 17 and are met by the references as discussed above.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama Japanese Patent Application Publication No. 2000-268443 in view of Amamiya Japanese Patent Application Publication No. 2000-295507 as applied to claim 17 above, and further in view of Kita U.S. Patent No. 5,199,593.

Regarding claim 30, Takayama as modified by Amamiya disclose all the limitations of claim 17 as discussed above. The previously discussed modification fails to teach welded seams joining the casing of the cartridge.

Kita however discloses a cartridge type storage device wherein the casing, which encloses the medium, is welded for the purpose of joining the separate parts together (column 4, line 59 through column 5, line 10).

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Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the welded casing as taught by Kita to the cartridge disclosed by Takayama as modified by Amamiya in order to securely bond the cartridge casing

9. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama Japanese Patent Application Publication No. 2000-268443 in view of Amamiya Japanese Patent Application Publication No. 2000-295507 as applied to claim 17 above, and further in view of Heigl U.S. Patent No. 4,746,796.

Regarding claim 31, Takayama as modified by Amamiya disclose all the limitations of claim 17 as discussed above. The previously discussed modification fails to teach glued seams joining the casing of the cartridge.

Heigl however discloses a cartridge type storage device wherein the casing, which encloses the medium, is glued for the purpose of joining the separate parts together (column 2, lines 61-63).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the glued casing as taught by Heigl to the cartridge disclosed by Takayama as modified by Amamiya in order to obtain a strong bond between the casing portions of the cartridge and to protect the medium from damage.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniell L. Negrón whose telephone number is 703-305-6985. The examiner can normally be reached on Monday-Friday (8:30-6:00) Alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on 703-308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

DLN 
December 18, 2003


**DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**